IN THE CLAIMS

Please cancel Claims 1-13 and 21-27 of the originally filed claims. With entry of the present amendment, the claims of the present application are as follows:

Claims 1-13. (Canceled).

14. (Original) Transmitting apparatus wherein a digitized television IF signal is transformed into a transport channel bit-stream (TCBS) for transmission of the said digitized television IF signal from a first location (FL) to one or more second locations (SL), comprising:

a splitter (SP) for splitting a sample (S1) of the said digitized television IF signal into N most significant bits (MSB) and M-N least significant bits (LSB).

an encoder DPCM-core (D1) for compression of the N most significant bits (MSC) of a sample (S1) into a N-C bit compressed transport sample (CTS), generating a clipped prediction error ($(e_{enc})c$),

an output for the transport channel bit-stream (TCBS).

a first location clipping detector (BSC1 or BSC12) which generates a first location PCM-bit substitution control signal (SC1) indicating what is to be transmitted as residual transport sample (RTS), either the M-N least significant bits (LSB) of the sample (S1) of the first digitized television IF signal, or a substitution value (CE) being a first function of both the clipping error corresponding to the said sample S1 of the first digitized television IF signal, and the M-N ISB's of the said sample (S1) of the first digitized television IF signal, and

the first location substitutor (BS1) which substitutes the M-N least significant bits (LSB) by a substitution value (CE), depending on the value of the first location PCM-bit substitution control signal (SC1).

15. (Original) Transmitting apparatus according to claim 14, further comprising:

a prediction mapper (PM1) for generating a mapped prediction ($m(\hat{x}_{enc})$) from an encoder prediction ($\hat{x}_{enc}$) from the encoder CPCM-core (D1), and

an adder (ADD12) which adds the mapped prediction ($m(\hat{x}_{enc})$) and the clipped prediction error ($(e_{enc})c$), and then wraps around the result of the addition, thus obtaining a compressed transport sample

an adder (ADD12) which adds the mapped value ($m(\hat{x}_{enc})$) and the clipped prediction error ($(e_{enc})c$), and then wraps around the result of the addition, thus obtaining a compressed transport sample (CTS), and wherein the transmitting apparatus includes at least one of (A) and (B):

(A) the encoder DPCM-core (D1) comprises means to clip the prediction errors to a range equal to or smaller than $2^{(N-C)}-1$, and

(B) the prediction mapper (PM1) comprises means for a uniform or non-uniform mapping.

16. (Original) Transmitting apparatus wherein a digitized television IF signal is transformed into a transport channel bit-stream (TCBS) for transmission of the said digitized television IF signal from a first location (FL) to one or more second locations (SL), comprising:

an encoder DPCM-core (D1) for compression of a sample S1 of the first digitized television IF signal, represented by N bits, into a N-C-bit compressed transport sample (CTS), generating a prediction ($\hat{x}_{enc}$) and a clipped prediction error ($(e_{enc})c$),

an output for the transport channel bit-stream (TCBS),

a prediction mapper (PM1) for generating a mapped prediction ($m(\hat{x}_{enc})$) from the prediction ($\hat{x}_{enc}$) from the encoder DPCM-core (D1), and

an adder (ADD12) which adds the mapped prediction ($m(\hat{x}_{enc})$) and the clipped prediction error ($(e_{enc})c$), and then wraps around the result of the addition, thus obtaining a compressed transport sample (CTS), and wherein the transmitting apparatus includes at least one of (A) and (B):

(A) the encoder DPCM-core (D1) comprises means to clip the prediction errors to a range equal to or smaller than $2^{(N-C)}-1$, and

(B) the prediction mapper (PM1) comprises means for a uniform or a non-uniform mapping.

17. (Original) Transmitting apparatus according to claim 14, further comprising:

a phase-locked loop (PLL1) which estimates the phase (Φ_{enc}) of the IF carrier of the digitized television IF signal, based on a locally decoded television IF signal ($\tilde{x}_{enc}$) from the encoder DPCM-core (D1),

a luminance estimator (LUE1) which estimates the luminance of the video signal contained in the digitized television IF signal, based on the decoded television IF signal ($\tilde{x}_{enc}$) and on the estimated phase (Φ_{enc}) of the IF carrier, resulting in an estimated luminance (L_{enc}), and

a shift estimator (SHE1) which estimates a shift (sh_{enc}), based on the estimated phase (Φ_{enc}) of the IF carrier and on the estimated luminance (L_{enc}),

wherein the encoder DPCM-core comprises means to clip the prediction error (e_{enc}) to a range which is shifted over a shift (sh_{enc}).

18. (Original) Transmitting apparatus wherein a digitized television IF signal is transformed into a transport channel bit-stream (TCBS) for transmission of the said digitized television IF signal from a first location (FL) to one or more second locations (SL), comprising:

an encoder DPCM-core (D1) for compression of a sample (S1) of the first digitized television IF signal, represented by N bits, into a N-C-bit compressed transport sample (CTS), generating a prediction ($\tilde{x}_{enc}$) and a clipped prediction error ((e_{enc})c) ,

an output for a transport channel bit-stream (TCBS),

a phase-locked loop (PLL1) which estimates the phase (Φ_{enc}) of the IF carrier of the digitized television IF signal, based on a locally decoded television IF signal ($\tilde{x}_{enc}$) from the encoder DPCM-core (D1),

a luminance estimator (LUE1) which estimates the luminance of the video signal contained in the digitized television IF signal, based on the decoded television IF signal ($\tilde{x}_{enc}$) and on the estimated phase (Φ_{enc}) of the IF carrier, resulting in a estimated luminance (L_{enc}), and

a shift estimator (SHE1) which estimates a shift (sh_{enc}), based on the estimated phase (Φ_{enc}) of the IF carrier and on the estimated luminance (L_{enc}),

wherein the encoder DPCM-core comprises means to clip the prediction error (e_{enc}) to a range which is shifted over a shift (sh_{enc}).

19. (Original) Transmitting apparatus according to claim 18, further comprising:

a prediction mapper (PM1) for generating a mapped value $m(y)$ of either the encoder prediction $y = (\hat{x}_{enc})$ from the encoder DPCM-core (D1) or the sum $y = (\hat{x}_{enc}) + sh$ of the encoder prediction $(\hat{x}_{enc})$ and the clip range shift sh, and

an adder (ADD12) which adds the mapped value ($m(y)$) and the clipped prediction error ((e_{enc})c), and then wraps around the result of the addition, thus obtaining a compressed transport sample (CTS), and wherein the transmitting apparatus includes at least one of (A) and (B):

(A) the encoder DPCM-core (D1) comprises means to clip the prediction errors to a range equal to or smaller than $2^{(N-C)}-1$, and

(B) the prediction mapper (DM1) comprises means for a uniform or a non-uniform mapping.

20. (Original) Transmitting apparatus according to claim 17, further comprising:

a prediction mapper (PM1) for generating a mapped value $m(y)$ of either the encoder prediction $y = (\hat{x}_{enc})$ from the encoder DPCM-core (D1) or the sum $y = (\hat{x}_{enc}) + sh$ of the encoder prediction $(\hat{x}_{enc})$ and the clip range shift *sh*, and

an adder (ADD12) which adds the mapped value ($m(y)$) and the clipped prediction error ($(e_{enc})c$), and then wraps around the result of the addition, thus obtaining a compressed transport sample (CTS), and the transmitting apparatus includes at least one of (A) and (B):

(A) the encoder DPCM-core (D1) comprises means to clip the prediction errors to a range equal to or smaller than $2^{(N-C)}-1$, and

(B) the prediction mapper (PM1) comprises means for a uniform or non-uniform mapping.

Claims 21-27. (Canceled).